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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: PENN-0664
Inventors: Ginsberg et al.
Serial No.: Not yet assigned
Filing Date: January 16, 2002
Examiner: Not yet assigned
Group Art Unit: Not yet assigned
Title: DIAGNOSTIC METHODS OF ALZHEIMER'S
DISEASE BY DETECTION OF MULTIPLE MRNAS

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By Jane Massey Licata
Typed Name: **Jane Massey Licata**, Reg. No. 32,257

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

() In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:

- () Certification in Accordance with §1.97(e) is set forth below; or

- () The fee of \$240.00 as set forth in §1.17(p) is attached.

- () In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I)(1).

- () Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed with the exception of BQ Trojanowski, J.Q. et al. 1996 In: Current Neurology, Vol. XVI, Boston: Houghton Mifflin. In view of the voluminous nature of this publication and the likelihood that the

Examiner may have a copy available to him or her, a copy has not been included herewith. However, if the Examiner does not have a copy available, Applicant will endeavor to supply one at the Examiner's request.

(XX) In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/183,636, filed October 30, 1998, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

() The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(XX) All listed references are in the English language.

Respectfully submitted,

Jane Massey Licata

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Date: January 16, 2002

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Form PTO-1449 Modified

List of Patents and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce

Docket No.
PENN-0664

Serial No.
09/183,636

Applicant
GINSBERG, ET AL.

Filing Date
OCTOBER 30, 1998

Group
NOT YET ASSIGNED

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AA	Arai, H. et al., "Defined neurofilament, τ , and β -amyloid precursor protein epitopes distinguish Alzheimer from non-Alzheimer senile plaques", 1990 <i>Proc. Natl. Acad. Sci. USA</i> 87:2249-2253
AB	Arai, H. et al., "Expression Patterns of β -Amyloid Precursor Protein (β -APP) in Neural and Nonneural Human Tissues from Alzheimer's Disease and Control Subjects", 1991. <i>Ann. Neurol.</i> 30:686-693
AC	Ashburn et al., "Amyloid probes based on Congo Red distinguish between fibrils comprising different peptides", 1996 <i>Chemistry and Biology</i> 3:351-358
AD	Bahmanyar, S. et al., "Localization of Amyloid β Protein Messenger RNA in Brains from Patients with Alzheimer's Disease", 1987. <i>Science</i> 237:77-88
AE	Becker, I. et al., "Single-Cell Mutation Analysis of Tumors from Stained Histologic Slides", 1996. <i>Lab. Invest.</i> 75:801-807
AF	Crino, P.B. and J. Eberwine, "Molecular Characterization of the Dendritic Growth Cone: Regulated mRNA Transport and Local Protein Synthesis", 1996. <i>Neuron</i> 17:1173-1187
AG	Crino, P.B. et al., "Embryonic neuronal markers in tuberous sclerosis: Single-cell molecular pathology", 1996. <i>Proc. Natl. Acad. Sci. USA</i> 93:14152-14157
AH	Dart, L.H. and T.R. Turner, "Fluorescence Microscopy in Exfoliative Cytology", 1959. <i>Lab. Invest.</i> 8:1513-1522
AI	d'Amore, F. et al., "Molecular Studies on Single Cells Harvested by Micromanipulation from Archival Tissue Sections Previously Stained by Immunohistochemistry or Nonisotopic In Situ Hybridization", 1997 <i>Lab. Invest.</i> 76:219-224

EXAMINER

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Form PTO-1449 Modified List of Patents and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce		Docket No. PENN-0664	Serial No. 09/183,636
		Applicant GINSBURG, ET AL.	
		Filing Date OCTOBER 30, 1998	Group NOT YET ASSIGNED
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AJ	Eberwine, J. et al., "Analysis of gene expression in single live neurons", 1992. <i>Proc. Natl. Acad. Sci.</i> 89:3010-3014	
	AK	Emmert-Buck, M.R. et al., "Laser Capture Microdissection", 1996. <i>Science</i> 274:998-1001	
	AL	Ginsberg, S.D. et al., "The AMPA Glutamate Receptor gluR3 Is Enriched In Oxytocinergic Magnocellular neurons and is Localized at Synapses", 1995. <i>Neuroscience</i> 65:563-575	
	AM	Golde, T.E. et al., "Expression of β Amyloid Protein Precursor mRNAs: Recognition of a Novel Alternatively Spliced Form and Quantitation in Alzheimer's Disease Using PCR 1990. <i>Neuron</i> 4:253-267	
	AN	Goldgaber, D. et al., "Characterization and Chromosomal Localization of a cDNA Encoding Brain Amyloid of Alzheimer's Disease", 1987. <i>Science</i> 235:877-880	
	AO	Hyman, B.T. et al., "Alzheimer's Disease: Cell-Specific Pathology Isolates the Hippocampal Formation", 1984 <i>Science</i> 225:1168-1170	
	AP	Hyman, B.T. et al., "Memory-related neural systems in Alzheimer's disease: An anatomic study", 1990 <i>Neurology</i> 40:1721-1730	
	AQ	Hyman, B.T. et al., "Nonisotopic in situ hybridization of amyloid beta protein precursor in Alzheimer's disease: expression in neurofibrillary tangle bearing neurons and in the microenvironment surrounding senile plaques", 1993. <i>Mol. Brain Res.</i> 18:253-258	
	AR	Kang, J. et al., "The precursor of Alzheimer's disease amyloid A4 protein resembles a cell-surface receptor", 1987 <i>Nature</i> 325:733-736	
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	AS	Kosik, K.S. et al., "Tau In Situ Hybridization in Normal and Alzheimer Brain: Localization in the Somatodendritic Compartment", 1989. <i>Ann. Neurol.</i> 26:353-361	
	AT	Lee, V.M.-Y et al., "A68: A Major Subunit of Paired Helical Filaments and Derivatized Forms of Normal Tau", 1991 <i>Science</i> 251:675-678	
	AU	MacGibbon, G.A. et al., "Bax expression in mammalian neurons undergoing apoptosis, and in Alzheimer's disease hippocampus", 1997. <i>Brain Res.</i> 750:223-234	
	AV	Mai, J.K. et al., "Use of Acridine Orange for Histologic Analysis of the Central Nervous System", 1984. <i>J. Histochem. Cytochem.</i> 32:97-104	
	AW	McMaster, G.K. and G.G. Carmichael, "Analysis of single-and double-stranded nucleic acids on polyacrylamide and agarose gels by using glyoxal and acridine orange", 1977. <i>Proc. Natl. Acad. Sci.</i> 74; 4835-4838	
	AX	Mikel, U.V. and R.L. Becker, "A Comparative Study of Quantitative Stains for DNA in Image Cytometry", 1991. <i>Analyt. Quant. Cytol. Histol.</i> 13:253-260	
	AY	Mufson, E.J. et al., "Reduction in p140-TrkA Receptor Protein within the Nucleus Basalis and Cortex in Alzheimer's Disease", 1997. <i>Exp. Neurol.</i> 146:91-103	
	AZ	Pinto, A. et al., "Acridine Orange-RNA Histofluorescence of Sarcomas and Small Round Cell Tumors of Childhood", - 1990. <i>Arch. Pathol. Lab. Med.</i> 114(6):585-588	
	BA	Rigler, R., "Microfluorometric Characterization of Intracellular Nucleic Acids and Nucleoproteins by Acridine Orange", 1966. <i>Acta Physiol. Scand.</i> 67(Suppl.):7-122	
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	BB	Robakis, N.K. et al., "Molecular cloning and characterization of a cDNA encoding the cerebrovascular and the neuritic plaque amyloid peptides", 1987. <i>Proc. Natl. Acad. Sci. USA</i> 84:4190-4194	
	BC	Salehi, A. et al., "Co-Localization of High-Affinity Neurotrophin Receptors in Nucleus Basalis of Meynert Neurons and Their Differential Reduction in Alzheimer's Disease", 1996. <i>Neurosci.</i> 75:373-387	
	BD	Schmechel, D.E. et al., "Cellular Localization of Messenger RNA Encoding Amyloid-Beta-Protein in Normal Tissue and in Alzheimer Disease", 1988. <i>Alzheim. Dis. Assoc. Disord.</i> 2:96-111	
	BE	Schmidt, M.L. et al., "Plaque-Associated Neuronal Proteins: A Recurrent Motif in Neuritic Amyloid Deposits throughout Diverse Cortical Areas of the Alzheimer's Disease Brain", 1994. <i>Exp. Neurol.</i> 130:311-322	
	BF	Schummelfeder, N., "Histochemical Significance of the Polychromatic Fluorescence Induced in Tissues Stained with Acridine Orange", 1958. <i>J. Histochem. Cytochem.</i> 6:392-393	
	BG	Schmued, L.C. et al., "Some Fluorescent Counterstains for Neuroanatomical Studies ¹ ", 1982. <i>J. Histochem. Cytochem.</i> 30:123-128	
	BH	Schmidt, M.L. et al., "Phosphate Dependent and Independent Neurofilament Epitopes in the Axonal Swellings of Patients with Motor Neuron Disease and Controls", 1987 <i>Lab. Invest.</i> 56:282-294	
	BI	Selkoe, D.J., "Cell Biology of the Amyloid β -Protein Precursor and the Mechanism of Alzheimer's Disease", 1994 <i>Annu. Rev. Cell Biol.</i> 10:373-403	
	BJ	Selkoe, D.J., "Isolation of Low-Molecular-Weight Proteins from Amyloid Plaque Fibers in Alzheimer's Disease", et al. 1986. <i>J. Neurochem.</i> 46:1820-1834	
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	BK	Strittmatter, W.J. and A.D. Roses, "Apolipoprotein E and Alzheimer disease", 1995. <i>Proc. Natl. Acad. Sci. USA</i> 92:4725-4727	
	BL	Su, J.H. et al., "Bax Protein Expression Is Increased in Alzheimer's Brain: Correlations with DNA Damage, Bcl-2 Expression, and Brain Pathology", 1997. <i>J. Neuropathol. Exp. Neurol.</i> 56:86-93	
	BM	Szabo, M.M. and E. Roboz-Einstein, "Acidic Polysaccharides in the Central Nervous System ¹ ", 1962. <i>Arch. Biochem. Biophys.</i> 98:406-412	
	BN	Tanzi, R.E. et al., "Amyloid β Protein Gene: cDNA, mRNA Distribution, and Genetic Linkage Near the Alzheimer Locus", 1987. <i>Science</i> 235:880-884	
	BO	Topaloglu, H. and H.B. Sarnat, "Acridine Orange-RNA Fluorescence of Maturing Neurons in the Perinatal Rat Brain", 1989. <i>Anat. Rec.</i> 224:88-93	
	BP	Trojanowski, J.Q. et al. 1996 In: <i>Current Neurology</i> , Vol. XVI, Boston: Houghton Mifflin	
	BQ	VanGelder, R. et al., "Amplified RNA synthesized from limited quantities of heterogeneous cDNA", 1990. <i>Proc. Natl. Acad. Sci. USA</i> 87:1663-1667	
	BR	von Bertalanffy, L. and I. Bickis, "Identification of Cytoplasmic basophilla (Ribonucleic Acid) By Fluorescence Microscopy", 1956. <i>J. Histochem. Cytochem.</i> 1956. 4:481-493	
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